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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,685	10/30/2003	Michael Harville	200313422-1	3564

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FORT COLLINS, CO 80527-2400

EXAMINER

ALAM, UZMA

ART UNIT	PAPER NUMBER
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2157

MAIL DATE	DELIVERY MODE
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09/04/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/698,685

Applicant(s)

HARVILLE ET AL.

Examiner

Uzma Alam

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 25 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 36-74 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 36-74 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. In view of the appeal brief filed on May 25, 2007, PROSECUTION IS HEREBY REOPENED. A new grounds of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below.

Claims 1 and 36-74 are pending. Claims 1 and 36-74 represent a method for managing a streaming media service.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 36-74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kenner et al. US Patent No. 6,665,706 in view of Perlman et al. US Patent No. 6,141,693. Kenner teaches the invention as claimed including a system for optimized retrieval of video data in which a management server [MSP 32] manages the connection between multiple source sites and the client (see abstract). Perlman teaches the invention as claimed including a management server [server 605] functionally located between multiple sources and a client which combines digital information with a video stream to modify or augment video frames in the video stream from a source to be presented to a client (see abstract).

As per claim 1, Kenner teaches a method for managing a streaming media service, said method comprising:

receiving a request for a streaming media service from a client, (client (12) requests data from MSP (32); column 7, lines 1-15, lines 60-67; column 8, lines 1-5);

selecting a service location manager to which to provide said request from a plurality of service location managers, said service location manager configured for selecting a service provider from a plurality of service providers (using a MSP to select a service provider; column 7, lines 63-67, column 8, lines 1-5);

selecting said service provider to which to assign said media service component from a plurality of service providers of a network (selecting a content provider; column 12, lines 36-42);

informing said service provider of said assignment to perform said media service component, causing said service provider to prepare to perform said streaming media service on

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streaming media (sending stream to client after quality of service standards are met; column 13, lines 1-10);

using information to determine whether to initiate a handoff of said streaming media service from said service provider to another service provider; and if it is determined to initiate said handoff, initiating said handoff (if one content provider does not provide the required information at the required quality of service, getting information from a mirror site; column 13, lines 11-60).

The Kenner reference teaches a device [MSP 32] and method for managing a media stream between multiple stream sources and a client. The device in Kenner performs many functions, including network and packet monitoring (column 7, lines 65-67; column 8, lines 1-41).

Kenner does not teach a streaming media service comprising a media service component and selecting said service provider to which to assign said media service component from a plurality of service providers of a network.

The Perlman reference teaches said streaming media service comprising a media service component and selecting said service provider to which to assign said media service component from a plurality of service providers of a network. Perlman teaches this by a server 605 which is located between multiple sources and a client. This server transcodes or filters the stream from the source before it is sent to the client (Figure 6, transcoding: column 6, specifically lines 30-67; filtering: column 9, lines 1-10). It would have been obvious to a person of ordinary skill in the art at the time of the invention to combine the functions of the server of Perlman with the MSP of Kenner. Using the known application of a management server between multiple sources and a

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client that manages the exchange of data between the source and the client would have been obvious to one of ordinary skill.

As per claim 36, Kenner and Perlman teach the method as recited in claim 1, wherein said information comprises information received from said service providers and information associated with location and priority of said service providers (Kenner: column 13, lines 36-42).

As per claim 37, Kenner and Perlman teach the method as recited in claim 1, wherein said information comprises information received from any client device that is involved in said streaming media service (Kenner: the user send relevant information through the MSP for the required service it is requesting; column 8, lines 43-49; column 9, lines 46-55).

As per claim 38, Kenner and Perlman teach the method as recited in claim 1, wherein said information comprises information associated with network conditions (Kenner: column 11, lines 37-49).

As per claim 39, Kenner and Perlman teach the method as described in claim 1, wherein said selecting said service location manager comprises: maintaining a record comprising identifying information for a set of service location managers among said plurality of service location managers; and selecting said service location manager in a round robin manner from said record (Kenner: having a database of content providers that provide the required data and

their resources; column 13, lines 26-58).

As per claim 40, Kenner and Perlman teach the method as described in claim 1, wherein said selecting said service location manager comprises a comparison of available resources of a first set of service providers supervised by a first service location manager and available resources of a second set of service providers supervised by a second service location manager (Kenner: column 11, lines 37-49; column 13, lines 11-25).

As per claim 41, Kenner and Perlman teach the method as described in claim 1, wherein said selecting said service location manager comprises a comparison of processing loads of at least two service location managers among said plurality of service location managers (Kenner: column 13, lines 11-25).

As per claim 42, Kenner and Perlman teach the method as described in claim 1, wherein said selecting said service location manager is based on an estimate of a network communication condition between two entities connected by the network (Kenner: column 11, lines 37-49).

As per claim 43, Kenner and Perlman teach the method as described in claim 1, further comprising: notifying a second service location manager among said plurality of service location managers of the assignment of said service provider to perform said media service component (Kenner: column 13, lines 11-25).

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As per claim 44, Kenner and Perlman teach the method as described in claim 1, wherein said service provider is supervised by more than one service location manager among said plurality of service location managers (Kenner: column 8, lines 1-5).

As per claim 45, Kenner and Perlman teach the method as described in claim 44, further comprising: maintaining a record comprising identifying information of a set of service location managers among said plurality of service location managers, each service location manager of said set of service location managers supervising said service provider; and notifying said set of service location managers according to said record of said assignment of said service provider to perform said media service component (Kenner: column 13, lines 26-58).

As per claim 46, Kenner and Perlman teach the method as described in claim 1, further comprising: receiving resource availability information from said plurality of service providers, wherein said information is ascertained from ongoing resource measurements; and said selecting said service provider based on said resource availability information (Kenner: column 8, lines 43-49).

As per claim 47, Kenner and Perlman teach the method as described in claim 46, wherein said resource availability information is pushed from said plurality of service providers (Kenner: column 12, lines 43-60; column 16, lines 14-20).

As per claim 48, Kenner and Perlman teach the method as described in claim 46, wherein said receiving resource availability information occurs in response to polling of said service providers (Kenner: column 12, lines 43-60).

As per claim 49 Kenner and Perlman teach the method as described in claim 1, wherein said selecting said service provider is based on static service provider information or static network information (Kenner: column 13, lines 26-58).

As per claim 50, Kenner and Perlman teach the method as described in claim 49, wherein said static service provider information or static network information consists of at least one of the following: information concerning computational and memory resources, connectivity and expected bandwidth and latency between servers, client and content addresses, session dispatch history, and network proximity (Kenner: column 12, lines 43-60).

As per claim 51, Kenner and Perlman teach the method of claim 1, wherein said selecting said service provider comprises: maintaining a record comprising assignments of service providers to perform media service components; and said selecting said service provider based on said record (Kenner: column 13, lines 26-58).

As per claim 52, Kenner and Perlman teach the method of claim 1, wherein said selecting said service provider comprises: maintaining a record comprising assignments of service providers to perform media

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service components (Kenner: column 13, lines 26-59);

receiving resource availability information from said plurality of service providers, wherein said information is ascertained from ongoing resource measurements (Kenner: column 12, lines 43-60); and

said selecting said service provider based on said resource availability information and said record (Kenner: column 13, lines 11-25).

As per claim 53, Kenner and Perlman teach the method as described in claim 1, wherein said selecting said service provider is based on an estimate of resources associated with performing said service (column 13, lines 26-58).

4. Claims 54-60 disclose a computer readable medium comprising computer-executable instructions stored thereon for implementing a method and are rejected under the same rationale as claims 1, 36-53 which teach the method.

As per claim 61, Kenner teaches a system for providing streaming content to a client device, said system comprising:

a plurality of service location managers, each service location manager capable of managing a handoff of a service based on information received (column 12, lines 36-42; column 13, lines 1-60);

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a plurality of service providers, each service provider capable of performing said service on an item of streaming input content to produce said streaming content (column 7, lines 1-15, lines 60-67; column 8, lines 1-5); and

a portal providing a first point of contact for said client device, said portal for receiving from said client device a request for performance of said service on said item of streaming input content, said portal for selecting a service location manager to which to provide said request from said plurality of service location managers, said service location manager for receiving said request from said portal and for selecting a service provider from said plurality of service providers and informing said service provider of said assignment to perform said service on said streaming input content to produce said streaming content, wherein said service location manager uses information to determine whether to initiate a handoff of said service from said service provider to another service provider (column 12, lines 36-42; column 13, lines 11-60). The Kenner reference teaches a device [MSP 32] and method for managing a media stream between multiple stream sources and a client. The device in Kenner performs many functions, including network and packet monitoring (column 7, lines 65-67; column 8, lines 1-41).

Kenner does not teach a streaming media service comprising a media service component and selecting said service provider to which to assign said media service component from a plurality of service providers of a network.

The Perlman reference teaches said streaming media service comprising a media service component and selecting said service provider to which to assign said media service component from a plurality of service providers of a network. Perlman teaches this by a server 605 which is located between multiple sources and a client. This server transcodes or filters the stream from

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the source before it is sent to the client (Figure 6, transcoding: column 6, specifically lines 30-67; filtering: column 9, lines 1-10). It would have been obvious to a person of ordinary skill in the art at the time of the invention to combine the functions of the server of Perlman with the MSP of Kennter. Using the known application of a management server between multiple sources and a client that manages the exchange of data between the source and the client would have been obvious to one of ordinary skill.

As per claim 62, Kenner and Perlman teach the system of claim 61, wherein said information includes information received from said service providers (Kenner: column 13, lines 26-58).

As per claim 63, Kenner and Perlman teach the system of claim 61, wherein said information includes information received from said client device (Kenner: column 8, lines 43-49; column 9, lines 46-55).

As per claim 64, Kenner and Perlman teach the system of claim 61, wherein said information includes information associated with network conditions (Kenner: column 11, lines 37-49).

As per claim 65, Kenner and Perlman teach the system of claim 61, wherein said portal maintains a record comprising a prioritized listing of at least one service location manager among said plurality of service location managers and selects said service location manager in

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order of priority according to said prioritized listing (Kenner: column 11, lines 37-49; column 13, lines 11-25).

As per claim 66, Kenner and Perlman teach the system of claim 61, wherein said portal selects said service location manager by comparing available resources of a first set of service providers supervised by said service location manager and available resources of a second set of service providers supervised by a second service location manager (Kenner: column 13, lines 11-25).

As per claim 67, Kenner and Perlman teach the system of claim 61, wherein said portal selects said service location manager based on an estimate of a network communication condition between two entities connected by the network (Kenner: column 11, lines 37-49).

As per claim 68, Kenner and Perlman teach the system of claim 61, wherein said service provider or said service location manager notifies a second service location manager among said plurality of service location managers of said assignment of said service provider to perform said service (Kenner: column 13, lines 11-25).

As per claim 69, Kenner and Perlman teach the system of claim 61, wherein said portal activates a second service location manager of said plurality of service location managers to perform the operation of said service location manager, provided said portal determines said

service location manager to be non-responsive (Kenner: column 14, lines 10-26).

As per claim 70, Kenner and Perlman teach the system of claim 61, wherein said service provider is supervised by more than one service location manager of said plurality of service location managers (Kenner: column 8, lines 1-5).

As per claim 71, Kenner and Perlman teach the system of claim 61, wherein said service provider is supervised by a first service location manager, and wherein said first service location manager transfers supervision of said service provider to a second service location manager (Kenner: column 14, lines 10-26).

As per claim 72, Kenner and Perlman teach the system of claim 61, wherein said service location manager receives resource availability information from said plurality of service providers, and wherein said selecting said service provider is based on said resource availability information (Kenner: column 13, lines 26-58).

As per claim 73, Kenner and Perlman teach the system of claim 61, wherein said service location manager maintains a record comprising assignments of service providers to perform services, and wherein said selecting said service provider is based on said record (Kenner: column 13, lines 26-58).

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As per claim 74, Kenner and Perlman teach the system of claim 61, wherein said service location manager selects said service provider based on static service provider information or static network information (Kenner: column 13, lines 26-58).

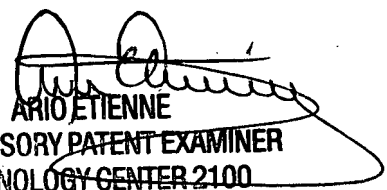
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Uzma Alam whose telephone number is (571) 272-3995. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Uzma Alam
Ua
August 13, 2007


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